

## TABLE OF CONTENTS

	Page
<b>LEGITIMATION SHEET</b>	<b>i</b>
<b>BIOGRAPHY</b>	<b>ii</b>
<b>ABSTRACT</b>	<b>iii</b>
<b>PREFACE</b>	<b>iv</b>
<b>TABLE OF CONTENTS</b>	<b>vi</b>
<b>FIGURES LIST</b>	<b>viii</b>
<b>TABLES LIST</b>	<b>ix</b>
<b>APPENDIXES LIST</b>	<b>x</b>
<b>CHAPTER I INTRODUCTION</b>	
1.1 Background	1
1.2 Problem Identification	4
1.3 Problem Limitation	5
1.4 Problem Formulation	5
1.5 Research Objective	6
1.6 Benefits of Research	6
<b>CHAPTER II LITERATURE REVIEW</b>	
2.1 Theoretical Framework	7
2.1.1 Learning Defenition, Purposes, Achievment, and Ability	7
2.1.1.1 Learning Defenitions	7
2.1.1.2 Learning Purposes	8
2.1.1.3 Learning Achievement	9
2.1.1.4 Learning Activity	10
2.1.2 Learning Model	12
2.1.2.1 Problem based Learning	13
2.1.2.1.1 Defenition and Characteristic of PBL	13
2.1.2.1.2 Syntax for Problem Based Learning	15
2.1.2.2 Conventional Learning	16
2.1.3 Subject Matter	17
2.1.3.1 Static Fluid	17
2.1.3.1.1 Density and Specific Gravity	19
2.1.3.1.2 Pressure on Fluid	20
2.1.3.1.3 Atmospheric Pressure (Air Pressure)	21
2.1.3.1.4 Pascal Principle	24
2.1.3.1.5 Archimedes Principle	24
2.1.3.1.6 Surface Tension	27
2.1.3.1.7 Capillarity	29
2.1.3.1.8 Viscosity	30
2.4. Conceptual Framework	31

2.5. Research Hypothesis	32
--------------------------	----

### **CHAPTER III RESEARCH METHODS**

3.1. Research Location and Research Time	33
3.1.1. Research Location	33
3.1.2. Research Time	33
3.2. Research Population and Research Sample	33
3.2.1. Research Population	33
3.2.2. Research Sample	33
3.3 Research Variables	34
3.4. Research Type and Research Design	34
3.4.1 Research Type	34
3.4.2. Research Design	34
3.5. Research Procedure	35
3.6. Research Instrument	37
3.6.1. Instrument of Student's Learning Activity	37
3.6.2. Validity Test	39
3.7. Data Analysis Techniques	39
3.7.1. Determine Average Value	39
3.7.2. Determine The Deviation Standard	40
3.7.3. Determine The Homogeneity Test	40
3.7.4. Normality Test	41
3.7.5. Hypothesis Test	42
3.7.5.1. Pre-test ability (two tail test)	42
3.7.5.2. Post-Test Ability Test	43

### **CHAPTER IV RESULT AND DISCUSSION**

4.1 Result of Research	45
4.1.2 Student Outcomes on Experiment Class	46
4.1.3 Student Outcomes on Control Class	47
4.1.4 Data Analysis	47
4.1.5 Hypothesis Test Result	48
4.2 Discussion	50
4.2.1 Outcomes of Experiment Class	50
4.2.2 Outcomes of Control Class	50

### **CHAPTER V CONCLUSION & SUGGESTION**

5.1 Conclusion	51
5.2 Suggestion	51

<b>REFERENCE</b>	<b>52</b>
------------------	-----------